

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1.-11. (Cancelled)

Claim 12. (Currently Amended) A deformable aerodynamic profiled member comprising:

a front profile area;

a rear profile area ~~in an outflow region relative to a flow direction;~~

shells which bound the profiled element member on a pressure side and on a suction side, which shells converge in a rear profile edge; and

d33 piezo actuators for deforming the profiled ~~members~~ member;

wherein said piezo actuators are arranged on said profiled member with an orientation such that their length changes substantially in the direction of the planes of the shells, when said actuators are acted upon by electricity.

Claim 13. (Previously Presented) The deformable aerodynamic profiled member according to Claim 12, wherein the d33 piezo actuators are arranged on at least one of the shells, on at least one of the pressure side and the suction side.

Claim 14. (Previously Presented) The deformable aerodynamic profiled member according to Claim 12, wherein the d33 piezo actuators are integrated into at least one of the shells, on at least one of the pressure side and the suction side.

Claim 15. (Previously Presented) The deformable aerodynamic profiled member according to Claim 14, wherein the at least one shell has a composite structure.

Claims 16-21. (Cancelled)

Claim 22. (Previously Presented) The deformable aerodynamic profiled member according to Claim 12, wherein the aerodynamic profile is one of a helicopter rotor blade, an aircraft wing, a turbine blade or the like.

Claim 23. (Previously Presented) The deformable aerodynamic profiled member according to Claim 12, wherein:

the piezo actuator comprises alternating lamina of d33 piezoelectric material and electrically conducting material, arranged in a stacking direction; and

the piezo actuators are oriented relative to said profiled member with the stacking direction coinciding substantially with a desired expansion direction of said profiled member.

Claim 24. (New) The deformable profiled member according to Claim 12, wherein said piezo actuators comprise d33 piezo actuators which comprise stack-form piezoelectric elements cut lengthwise, in a plane parallel to said expansion.

Claim 25. (New) The deformable aerodynamic profiled member according to Claim 12, wherein each of the d33 piezo actuators comprises a stack of alternating layers of piezoelectric materials and electrode layers formed of an electrically conducting material.

Claim 26. (New) The deformable aerodynamic profiled member according to Claim 25, wherein an electric field for inducing the d33 effect is supplied via the electrode layers.

Claim 27. (New) The deformable aerodynamic profiled member according to Claim 25, wherein the laminar d33 piezo actuators have a thickness of approximately 0.5 to 2.5 mm.

Claim 28. (New) The deformable aerodynamic profiled member according to Claim 27, wherein the laminar d33 piezo actuators have side edge dimensions of approximately 5 to 60 mm.